Metalmark Announces Major ARPA-H BREATHE Program Award

Company to Lead Implementation of Advanced Indoor Air Quality (IAQ) Solutions to Protect Health of Hospital Staff and Patients

A leading innovator in air filtration technology

CAMBRIDGE, MA, UNITED STATES, November 17, 2025 / EINPresswire.com/ -- Metalmark Innovations, a leading innovator in air filtration technology, announces it has been selected as a key partner in a collaborative project awarded by the Advanced Research Projects Agency for Health's (ARPA-H) BREATHE program. This initiative aims to revolutionize public health by enhancing indoor air quality monitoring capabilities and developing systems to forecast and mitigate airborne pathogen threats.

The project, led by Mayo Clinic, which was awarded up to $40 million for the Hospital Air QUality (HAIQU): Breathing Life into Patient Care, brings together a multi-institutional team including Siemens and Metalmark as well as leading academic collaborators. The project centers around a five-year effort to improve public health by enhancing indoor air quality monitoring capabilities and developing systems to forecast and mitigate airborne pathogen threats.
"We are honored to be part of this groundbreaking initiative that will transform how we monitor and improve indoor air quality," said Sissi Liu, CEO and Co-Founder at Metalmark. "Our expertise in IAQ technology positions us perfectly to implement field trials of innovative solutions that will ultimately protect the health of healthcare workers and patients alike."

Within the collaboration, Metalmark will spearhead the implementation of novel biosensors and mitigation solutions in emergency departments across Mayo Clinic's campuses in Florida, Arizona and Minnesota. The company's contribution will demonstrate the efficacy, cost-effectiveness, and energy efficiency of the approach for protecting the health of patients and healthcare staff.

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> *Sissi Liu, CEO and Co-Founder at Metalmark*

Mayo Clinic will drive the design, prototyping, and piloting of innovative, high-specificity air-based biosensors to detect pathogens, while also serving as the site host. Siemens will lead the development of respiratory risk assessment software with an integrated system that processes data from biosensors, conducts disease transmission risk assessments, and initiates risk mitigation strategies.

The three-phase project will begin with the development of biosensors to monitor emergency room air for aerosols such as viruses, bacteria, mold and allergens, with real-world testing to follow.

The ARPA-H BREATHE program focuses on three technical areas: creating indoor biosensors, developing respiratory risk assessment software, and deploying systems in buildings to cost-effectively reduce airborne pathogen transmission risks when needed.

About Metalmark
Metalmark is addressing growing global air quality problems by developing and manufacturing products that make a difference. First inspired by nanostructures present in the wings of the metalmark butterfly, the company creates sustainable products from the nanoscale up. For more information, visit https://metalmark.xyz

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